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SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: *HELEN PEZZUTO* Examiner #: *70058* Date: *6/16/04*
 Art Unit: *1713* Phone Number: *2-1108* Serial Number: *0961317*
 Mail Box and Bldg/Room Location: *RM 10-A29* Results Format Preferred (circle): *PAPER* DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: *SEE ATTACHED*

Inventors (please provide full names): *↓*

Earliest Priority Filing Date: *2/25/99*

For Sequence Searches Only Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

A copolymer containing a phosphate monomer defined by formula (1) and optionally contain alkyl (meth)acrylate monomers.

*Ex. of (1) → diphenyl-2-methacryloyloxyethyl phosphate
 → 2-hydroxyethyl (meth)acrylate acid phosphate*

Ex. of (b) → 2-ethylhexyl acrylate, methyl methacrylate

KEY WORDS:

*vibration (damper, damping, reduction)
 glass transition temperature (Tg)*

(Closest art printed out toward the beginning.)

| STAFF USE ONLY | Type of Search | Vendors and cost where applicable |
|--|---|-----------------------------------|
| Searcher: <i>ES</i> | NA Sequence (#) _____ | STN <i>\$ 755.59</i> |
| Searcher Phone #: _____ | AA Sequence (#) _____ | Dialog _____ |
| Searcher Location: _____ | Structure (#) <i>3</i> <i>(substantive)</i> | Questel/Orbit _____ |
| Date Searcher Picked Up: _____ | Bibliographic <i>and</i> | By Link _____ |
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| Searcher Prep & Review Time: <i>10</i> | Fulltext _____ | Sequence Systems _____ |
| Clerical Prep Time: _____ | Patent Family _____ | WWW/Internet _____ |
| Online Time: <i>120</i> | Other _____ | Other (specify) _____ |

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FILE 'REGISTRY' ENTERED AT 11:43:48 ON 21 JUN 2004
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=> display history full 11-

FILE 'LREGISTRY' ENTERED AT 10:05:11 ON 21 JUN 2004
L1 STR
L2 STR

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L3 SCR 2043
L4 50 SEA SSS SAM L1 AND L2 AND L3

FILE 'HCAPLUS' ENTERED AT 10:21:26 ON 21 JUN 2004
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L6 822 SEA SAWANO ?/AU
L7 25 SEA L5 AND L6
L8 10445 SEA NAKAMURA H?/AU
L9 123 SEA SAWANO T?/AU
L10 2 SEA L8 AND L9
SEL L10 1-2 RN

FILE 'REGISTRY' ENTERED AT 10:25:28 ON 21 JUN 2004
L11 17 SEA (111-88-6/BI OR 121-69-7/BI OR 169324-12-3/BI OR
L12 11 SEA L11 AND PMS/CI
L13 5 SEA L12 AND P/ELS

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L17 STR

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L20 50 SEA SUB=L19 SSS SAM (L15 OR L16) AND L17
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L22 766 SEA L21 AND 4/ELC.SUB

FILE 'HCA' ENTERED AT 11:24:10 ON 21 JUN 2004

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L24      315168 SEA (IMPACT? OR SHOCK?) (2A) (RESIST? OR IMPERVIOUS? OR
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              VIBRAT? OR ANTIVIBRAT? OR ANTISHOCK? OR ANTIIMPACT? OR
              DAMPEN? OR DAMPER?
L25      10 SEA L23 AND L24
L26      1233 SEA L21
L27      21 SEA L26 AND L24
L28      438489 SEA IMPACT? OR SHOCK? OR DAMP? OR ANTIIMPACT? OR
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L29      16 SEA L23 AND L28
L30      35 SEA L26 AND L28
L31      148185 SEA TG OR GT OR T(A)G OR GLASS? (2A) (TRANSITION? OR TEMP#
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L32      26 SEA L23 AND L31
L33      42 SEA L26 AND L31
L34      3 SEA (L32 OR L33) AND (L24 OR L28)
L35      13 SEA L14 OR L25 OR L34
L36      6 SEA L29 NOT L35
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L39      12 SEA L35 AND (1907-1999/PY OR 1907-1999/PRY)
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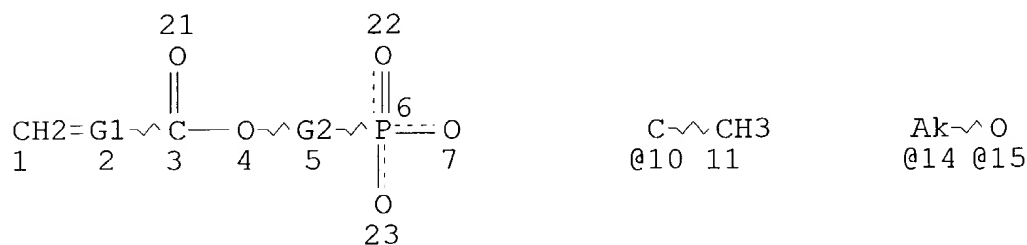
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L3 SCR 2043

L15 STR



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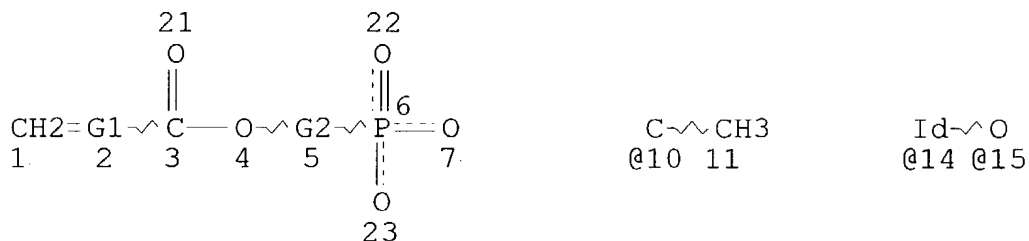
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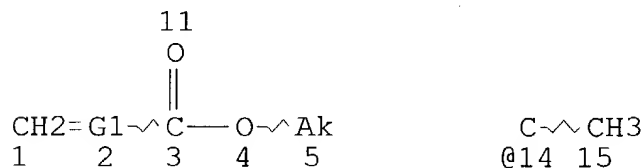
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 RING(S) ARE ISOLATED OR EMBEDDED
 NUMBER OF NODES IS 14

STEREO ATTRIBUTES: NONE
 L17 STR



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 DEFAULT MLEVEL IS ATOM
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STEREO ATTRIBUTES: NONE

L19 3917 SEA FILE=REGISTRY SSS FUL (L15 OR L16) AND L3

L21 1851 SEA FILE=REGISTRY SUB=L19 SSS FUL (L15 OR L16) AND L17

100.0% PROCESSED 3917 ITERATIONS

1851 ANSWERS

SEARCH TIME: 00.00.01

=> file hca

FILE 'HCA' ENTERED AT 11:44:14 ON 21 JUN 2004

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FILE COVERS 1907 - 17 Jun 2004 VOL 140 ISS 26

FILE LAST UPDATED: 17 Jun 2004 (20040617/ED)

=> d 139 1-12 cbib abs hitstr hitind

L39 ANSWER 1 OF 12 HCA COPYRIGHT 2004 ACS on STN

133:177669 Copolymer compositions containing (meth)acrylic and phosphoric ester monomers useful for **vibration**

dampers with good flame retardancy and transparency.

Nakamura, Hiroki; Sawano, Tetsuya (Mitsubishi Rayon Co., Ltd., Japan). PCT Int. Appl. WO 2000050477 A1 20000831, 19 pp.

DESIGNATED STATES: W: CN, KR, US; RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE. (Japanese). CODEN: PIXXD2. APPLICATION: WO 2000-JP1088 20000225. PRIORITY: JP 1999-48243 19990225; JP 1999-215241 19990729.

AB The compns. with a **T_g** of <80° and a tanδ at 25° and 10 Hz of >0.5, comprise copolymers of a (poly)-C2-14 alkylene glycol (meth)acrylate phosphate ester 20-100, (meth)acrylate monomer 0-80% and other comonomer 0-30%. Thus, a mixt. of di-Ph 2-(methacryloyloxy)ethyl phosphate 53 and 2-ethylhexyl acrylate 47 was heated with tert-hexyl peroxyphosphate 0.2 parts in a cell at 65° for 120 min then at 100° for 60 min to form a plate with a **T_g** -35°, tanδ 0.8 and UL-94 flammability rating V-0.

IT **169324-12-3P**, 2-Ethylhexyl acrylate-methyl methacrylate-MR 260 copolymer **288590-14-7P**, 2-Ethylhexyl acrylate-MR 260 copolymer **288590-15-8P**, 2-Ethylhexyl acrylate-JPA 514-MR 260 copolymer **288590-16-9P**, Butyl acrylate-MR 260 copolymer **288590-17-0P**, 2-Ethylhexyl acrylate-hexamethylene diacrylate-MR 260 copolymer (copolymer compns. contg. (meth)acrylic and phosphoric ester

monomers useful for **vibration dampers** with
good flame retardancy and transparency 0)

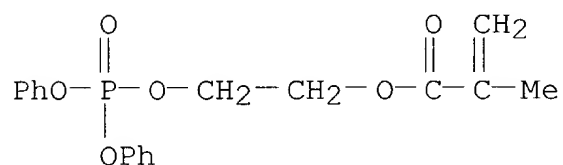
RN 169324-12-3 HCA

CN 2-Propenoic acid, 2-methyl-, 2-[(diphenoxyphosphinyl)oxy]ethyl
ester, polymer with 2-ethylhexyl 2-propenoate and methyl
2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 16069-23-1

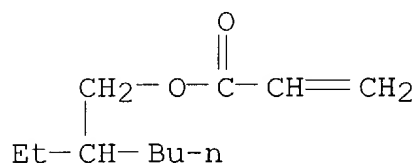
CMF C18 H19 O6 P



CM 2

CRN 103-11-7

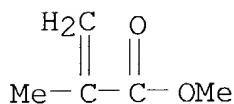
CMF C11 H20 O2



CM 3

CRN 80-62-6

CMF C5 H8 O2

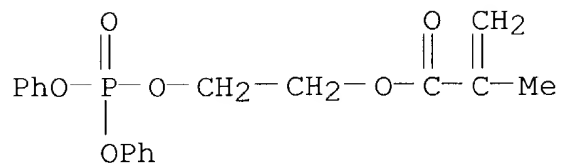


RN 288590-14-7 HCA

CN 2-Propenoic acid, 2-methyl-, 2-[(diphenoxyphosphinyl)oxy]ethyl
ester, polymer with 2-ethylhexyl 2-propenoate (9CI) (CA INDEX NAME)

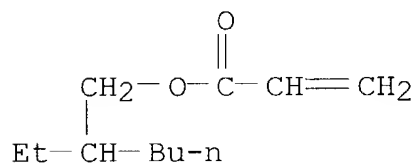
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CMF C18 H19 O6 P



CM 2

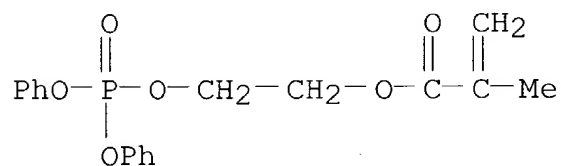
CRN 103-11-7
CMF C11 H20 O2



RN 288590-15-8 HCA
CN 2-Propenoic acid, 2-methyl-, 2-[(diphenoxyphosphinyl)oxy]ethyl ester, polymer with 2-ethylhexyl 2-propenoate and 2-hydroxyethyl 2-methyl-2-propenoate phosphate (9CI) (CA INDEX NAME)

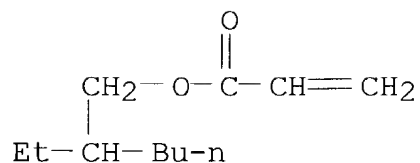
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CRN 16069-23-1
CMF C18 H19 O6 P



CM 2

CRN 103-11-7
CMF C11 H20 O2



CM 3

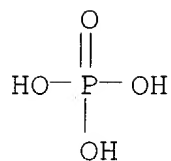
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CMF C6 H10 O3 . x H3 O4 P

CM 4

CRN 7664-38-2

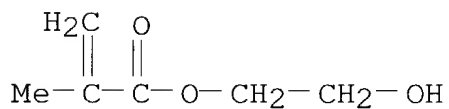
CMF H3 O4 P



CM 5

CRN 868-77-9

CMF C6 H10 O3



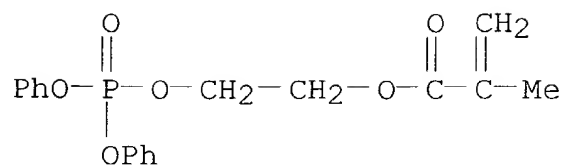
RN 288590-16-9 HCA

CN 2-Propenoic acid, 2-methyl-, 2-[(diphenoxyphosphinyl)oxy]ethyl ester, polymer with butyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

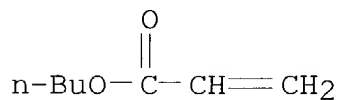
CRN 16069-23-1

CMF C18 H19 O6 P



CM 2

CRN 141-32-2
CMF C7 H12 O2

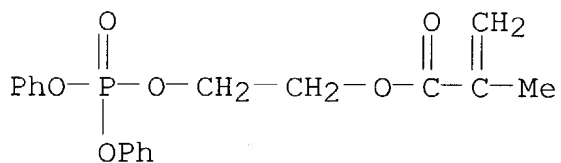


RN 288590-17-0 HCA

CN 2-Propenoic acid, 2-methyl-, 2-[(diphenoxyphosphinyl)oxy]ethyl
ester, polymer with 2-ethylhexyl 2-propenoate and 1,6-hexanediyl
di-2-propenoate (9CI) (CA INDEX NAME)

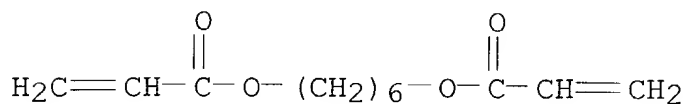
CM 1

CRN 16069-23-1
CMF C18 H19 O6 P



CM 2

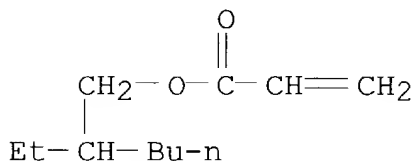
CRN 13048-33-4
CMF C12 H18 O4



CM 3

CRN 103-11-7

CMF C11 H20 O2



IC ICM C08F030-02

ICS F16F015-02

CC 35-4 (Chemistry of Synthetic High Polymers)

ST ethylene glycol methacrylate phosphate polymer **vibration damper**; flame retardancy **vibration damper**
methacryloyloxyethyl phosphate polymerIT **Vibration dampers**(copolymer compns. contg. (meth)acrylic and phosphoric ester monomers useful for **vibration dampers** with good flame retardancy and transparency 0)IT **169324-12-3P**, 2-Ethylhexyl acrylate-methyl methacrylate-MR260 copolymer **288590-14-7P**, 2-Ethylhexyl acrylate-MR 260copolymer **288590-15-8P**, 2-Ethylhexyl acrylate-JPA 514-MR260 copolymer **288590-16-9P**, Butyl acrylate-MR 260copolymer **288590-17-0P**, 2-Ethylhexyl acrylate-

hexamethylene diacrylate-MR 260 copolymer

(copolymer compns. contg. (meth)acrylic and phosphoric ester monomers useful for **vibration dampers** with good flame retardancy and transparency 0)IT 78-67-1, 2,2'-Azobisisobutyronitrile 94-36-0, Cadox B-CH 50, uses
121-69-7, N,N-Dimethylaniline, uses 51938-28-4, tert-Hexyl
peroxypivalate(radical initiator; copolymer compns. contg. (meth)acrylic and phosphoric ester monomers useful for **vibration dampers** with good flame retardancy and transparency 0)

L39 ANSWER 2 OF 12 HCA COPYRIGHT 2004 ACS on STN

130:8972 Near-infrared-absorbing laminated board, its manufacture, and
plasma display front panel using it. Honda, Satoshi; Amegawa,
Mutsuhide (Sumitomo Chemical Co., Ltd., Japan). Jpn. Kokai Tokkyo
Koho JP 10282335 A2 **19981023** Heisei, 8 pp. (Japanese).

CODEN: JKXXAF. APPLICATION: JP 1997-90777 19970409.

AB The laminated board has a polymer of a compn. contg. monomer(s)
having unsatd. double bond(s), P(O)(OH)n(OR)3-n [R = C1-18 alkyl,
aryl, aralkyl, alkenyl; otherwise, RO = C3-100 polyoxyalkyl,
(meth)acryloyloxyalkyl, (meth)acryloylpolyoxyalkyl; n = 1, 2], and a